

department for solving the several problems connected with agriculture and allied industries. At this stage I do not wish to say anything further on this subject.

As I stated before, Agricultural Experimental Stations, like other educational or scientific institutions, can never be run with profit, nor are they run with profit anywhere, so far as I am aware. Mr. Mukherji in his book on Indian Agriculture says that, ordinarily, the cost of cultivating an acre of land in an Experimental Station may roughly be estimated at just double the cost incurred in a ryot's holding. This does not mean that we are to encourage wastefulness.

The Central Farm.

In the Central Farm, we are doing the following work:—

1. Experimental and demonstration work;
2. Stock-breeding and dairying;
3. Horticulture—growing of fruit-trees, etc.;
4. Agricultural School.

These important items of work were arranged to be done in one centre, because it was thought and found by experience that it would be cheaper to have them in one centre, and that they will have more effective supervision than if they were located in different places.

The amount allotted for "Casual labour, etc.," about which some reference was made by some hon'ble members, represents the costs involved in all the operations connected with the different sections of work. No doubt, this allotment should have been split up into a number of sections, such as casual labour required for experimental work, the same required for demonstration, for orchards and plantations, for cattle-breeding, etc. This would involve the maintenance of a number of registers, and was not feasible with the one clerk with which the Farm office had to work.

Mr. CHAKKO CHERUVATHUR (*Vadakkancheri*).

May I know from the Hon'ble Member whether the spraying for arecanut disease, called *mahali*, was discovered by the Agricultural Department?

Mr. I. RAMAN MENON (*Superintendent of Agriculture and Panchayats*).

I am afraid, I cannot answer the question; scientific knowledge will be discovered in so many places; it will be applied in so many places, and I don't profess to lay any special claim to the discovery of that spraying solution. As a matter of fact, I may inform this House that the solution for spraying arecanut disease is called Bordeaux Mixture. It is called Bordeaux Mixture, because it was, by an accident, discovered in the district of Bordeaux that the fruits, sprayed with a solution of copper sulphate and quick-lime to prevent the fruits being stolen away by the people, resisted the attack of mildew. It was quite by an accident that the discovery was made. None can claim the art of discovering Bordeaux Mixture. It happened quite by a chance; later on the people of France took up the idea and started spraying grapes with a solution of Bordeaux Mixture.

President—You cannot finish within time if you go on like this.

Mr. CHAKKO CHERUVATHUR (*Vadakkancheri*).

May I know from the Hon'ble Member whether any investigation with regard to the *Mahali* disease was conducted by the Agricultural Department?

Mr. I. RAMAN MENON (*Superintendent of Agriculture and Panchayats*).

There was absolutely no necessity for conducting any special investigation in regard to the *Mahali* disease.

RAO SAHIB T. V. KASTURI RANGA AYYAR (*Diwan Peishkar*).

In 1088 and 1089 we made investigations, when I was in charge of the department.

Mr. EPHRAIM AMBOOKEN (*Adur*).

May I know the information? What is the rate of wages paid in the Central Farm for coolies,—the lowest rate of payment?

Mr. I. RAMAN MENON (*Superintendent of Agriculture and Panchayats*).

4 to 6½ as. to men, and 2½ to 3 as. to women.

Mr. EPHRAIM AMBOOKEN (*Adur*).

I want only the lowest rate.

Mr. I. RAMAN MENON (*Superintendent of Agriculture and Panchayats*).

There are different types of labourers who get different rates of wages. The lowest rate of wages for a man is 4 as. for a day, lowest wages for a woman 2½ as. and for a boy 2 as.

Mr. M. KRISHNA MENON (*Vyttila*).

Sir, has the Hon'ble Member paid any personal visit to any of the places affected by the pest? I know he has issued a circular with regard to the sending of the insects in a bottle to the Oilukkara Farm, to send specimens of insects or other crop pests if there are more than one variety of insects. If there is only one variety of pests, the Agricultural Superintendent will be able to say the name of the pest.

President.—Is there only one cocoanut-pest?

Mr. I. RAMAN MENON (*Superintendent of Agriculture and Panchayats*).

There is only one kind which is causing havoc.

President.—What is it? Please give the name.

Mr. I. RAMAN MENON (*Superintendent of Agriculture and Panchayats*).

I will tell you, Sir.

President.—Why could you not give the information now?

Mr. I. RAMAN MENON (*Superintendent of Agriculture and Panchayats*).

The name is "*Nephantis Serinopa*".

President.—If you have got a pamphlet about these insects, copies of it can be sent all over the Cochin-Kanayannur Taluk.

Mr. I. RAMAN MENON (*Superintendent of Agriculture and Panchayats*).

Similarly, the allotment for "Cattle food" represents the value of food consumed by the working cattle as well as by the animals in the Stock-breeding and Dairying sections.

Stock-breeding and Dairying works are very expensive items of work in their initial stages. This will

be clear from the report which I have placed before you for your perusal.

Agricultural School.—The Agricultural School could not be opened earlier for want of proper staff. As soon as we got a sufficient number of men, the school was opened. We have sent out 20 trained men, and we are now giving instruction to another batch of 20. In this connection, I have to bring to the notice of this House the co-operation of the Education Department with the Agricultural Department, and this is entirely due to the enthusiasm of the present Director of Public Instruction in the spread of Agricultural education in the State.

The Cocoanut Station.—This Farm which has become the subject of so much criticism in this House was opened with a view to solve the several problems connected with cocoanuts. The Hon'ble Member for the South Ezhuva constituency remarked that he knows everything about cocoanuts. I must, certainly, congratulate him on his wide knowledge about cocoanuts.

Mr. A. B. SALEM (*Jews*).

I think there is some personal reflection in that.

President.—There is no reflection. It is complimentary. (*Laughter.*)

Mr. I. RAMAN MENON (*Superintendent of Agriculture and Panchayats*).

Personally, I feel we have yet to learn a lot. We have, for a long time, been dreaming of our glorious past, and I feel it is high time to wake up to realise the actual situation. While the average out-turn of nuts per tree per year is between 50 and 100 in some well-managed estates in other countries, I doubt very much if the average of the State is anything above 30. There were nearly 1,400 trees in the Cocoanut Station, out of which nearly 900 were old and useless. The whole estate had to be laid out and replanted. There are now in the estate not more than 500 bearing trees. 630 trees have been planted, and some portion of the estate has to be laid out and planted. The expenditure proposed for the Cocoanut Station thus includes the cost of maintaining the grown-up trees as well as the cost required for maintaining the 630 trees planted